

Remarks/Arguments:

Claims 1-10, 34, and 36-47 are presently pending. Applicants herein amend claims 1, 34, 36, 39, and 40. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-10

Claims 1, 7, 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Purdum (US Pat. 5,899,088) in view of Gilman (US Pat. 2,808,093). Claims 5 and 8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Purdum and Gilman in view of Masaaki et al. (JP 07-091594) and Bane (US Pat. 5,441,170). Claims 2-4 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Purdum, Gilman, and Masaaki. Claim 6 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Purdum, Gilman, and Masaaki in view of Konarski (US Pat. 6,519,968). It is respectfully submitted, however, that these claims are patentable over these references for the reasons set forth below.

Applicants' invention, as recited by claim 1, includes a feature which is neither disclosed nor suggested by the cited references, namely:

... two of the peripheral walls ... each have a folding line
extending from an upper side edge to a lower side edge thereof
... respective halves of the peripheral wall on each side of the
folding line being rotatable around the folding line.

This means that two opposing peripheral walls have a vertical folding line in the middle thereof. The halves of each peripheral wall are rotatable such that the folding line moves toward the inside of the container. Each peripheral wall further includes two vacuum heat insulators which are separated by the folding line. This feature is found in the originally filed application at page 51, line 21 to page 54, line 5, and FIGS. 3 and 4. No new matter is added.

Claim 1 further recites additional features not disclosed or suggested by the cited references, namely:

... the bottom face sheet is attached to the four peripheral walls along lower side edges of the walls, so as to cover an entire outer surface of the bottom face, when the bottom face is rotated into a close position to form the box ...

This means a rectangular bottom face sheet covers an entire outer surface of the bottom face when the bottom face is rotated into a close position to form the box. This feature is found in the originally filed application at page 55, lines 3-11, and FIG. 8. No new matter is added.

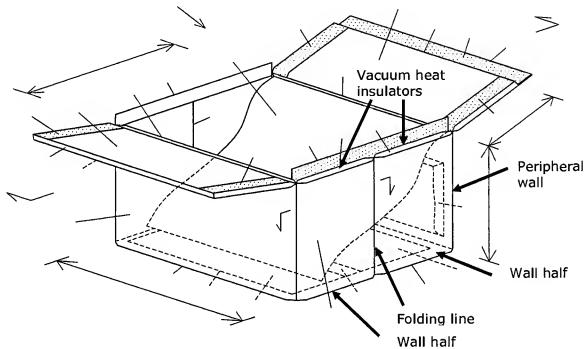
Claim 1 recites still more features not disclosed or suggested by the cited references, namely:

... the container has a collapsed state, in which the bottom face is ... positioned approximately parallel with and between two opposing peripheral walls not having the folding lines, and the halves of the two of the peripheral walls having the folding lines are rotated around the folding lines such that the two peripheral walls are folded approximately in half, with each half positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines.

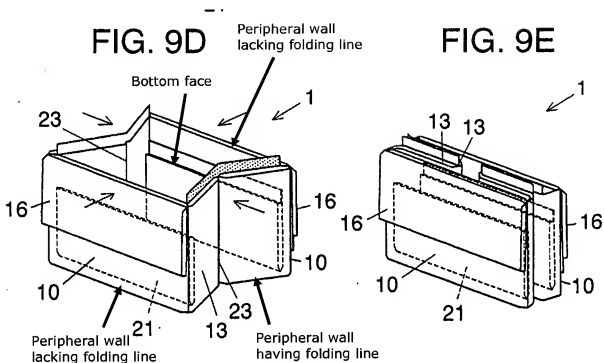
This means that in its collapsed state, the container has a bottom face that is positioned approximately parallel with and between two opposing peripheral walls lacking the folding lines. The two peripheral walls having the folding lines are folded in half such that each half is positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines. This feature is found in the originally filed application at page 59, line 11 to page 60, line 21, and FIGS. 9A-9E. No new matter is added.

The above features of claim 1 are illustrated in FIGS. 3 and 9D-9E, which are reproduced below for the purposes of illustration:

FIG. 3



As illustrated in FIG. 3, two opposing peripheral walls have a folding line in the middle thereof extending from the upper edge to the lower edge. The halves of each peripheral wall can be rotated such that the folding line moves toward the inside of the container. Each peripheral wall further includes two vacuum heat insulators which are separated by the folding line.



As illustrated in FIGS. 9D and 9E, the container has a bottom face that is positioned approximately parallel with and between two opposing peripheral walls lacking the folding lines. The two peripheral walls having the folding lines are folded in half such that each half is positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines.

Applicants respectfully submit that Purdum in view of Gilman fails to disclose, teach, or suggest at least the above features of claim 1.

Purdum is directed to systems and methods for maintaining temperature control. As illustrated in FIG. 1, Purdum discloses an insulated container comprises an outer housing 110 adapted to contain one or more heat transfer devices 140 and an inner product carrying container 180. See Purdum at column 8, lines 48-65, and FIG. 1.

The Office Action indicates that outer housing 110 corresponds to the cold-insulating container of claim 1. Applicants respectfully disagree.

Purdum fails to disclose, teach, or suggest that outer housing 110 includes a wall having a folding line located in the middle thereof. In fact, Purdum is entirely devoid of any teaching of folding lines formed in the walls of outer housing 110. Thus, Purdum must also fail to disclose, teach, or suggest that respective halves of a wall of housing 110 are rotatable around the folding line. Purdum must also fail to disclose, teach, or suggest a wall including two vacuum heat insulators which are separated by a folding line. This is different from claim 1, which requires that two of the peripheral walls on opposing sides each have a folding line formed in a middle thereof, and that each of the peripheral walls having the folding line also including two vacuum heat insulators that are separated along the folding line, and that respective halves of the peripheral wall on each side of the folding line are rotatable around the folding line such that the folding line moves toward the inside of the container.

Purdum also fails to disclose a collapsed state for outer housing 110. While Purdum discloses that outer housing 110 may be a cardboard box, Purdum provides no details regarding how the cardboard box may be collapsed. Thus, Purdum cannot disclose, teach, or suggest outer housing 110 having a collapsed state in which a bottom face is positioned approximately parallel with and between two opposing peripheral walls, and in which the halves of two peripheral walls having folding lines are positioned approximately parallel with and between the two opposing peripheral walls. This is different from claim 1, which requires that in the collapsed state, the bottom face be positioned approximately parallel with and between two opposing peripheral walls not having folding lines, and that the halves of two peripheral walls having folding lines are positioned approximately parallel with and between the two opposing peripheral walls not having folding lines.

Additionally, the Office Action indicates that heat transfer devices 140 correspond to the bottom face sheet of claim 1. Applicants respectfully disagree.

Purdum fails to disclose, teach, or suggest that heat transfer devices 140 are rectangular in shape. Purdum further fails to disclose, teach, or suggest that heat transfer devices 140 cover an outer surface of outer housing 110. To the contrary, heat transfer devices are positioning inside outer housing 110. This is different from claim 1, which requires that a flexible rectangle bottom face sheet that covers an entire outer surface of the bottom face when the box is formed.

Gilman is directed to frozen food shipping containers. As illustrated in FIG. 1, for example, Gilman discloses an insulated container 10 having outer walls 16. See Gilman at column 1, line 70 to column 2, line 29. Gilman fails to disclose folding lines formed in walls 16. Gilman further fails to disclose, teach, or suggest that insulated container 10 is collapsible.

Accordingly, Applicants respectfully submit that Purdum in view of Gilman fails to disclose, teach, or suggest "two of the peripheral walls on opposing sides of the container each have a folding line extending from an upper side edge to a lower side edge thereof, each folding line being located at a middle of the respective peripheral wall, each of the peripheral walls having the folding line also including two vacuum heat insulators, the insulators being separated along the folding line, respective halves of the peripheral wall on each side of the folding line being rotatable around the folding line such that the folding line moves toward the inside of the container...the bottom face sheet is attached to the four peripheral walls along lower side edges of the walls, so as to cover an entire outer surface of the bottom face, when the bottom face is rotated into a close position to form the box, and the container has a collapsed state, in which the bottom face is rotated inward around the lower side edge and positioned approximately parallel with and between two opposing peripheral walls not having the folding lines, and the halves of the two of the peripheral walls having the folding lines are rotated around the folding lines such that the two peripheral walls are folded approximately in half, with each half positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines," as recited in claim 1.

It is because Applicants includes the above features that the following advantages are achieved. "Especially, cold-insulating containers 1 of this exemplary embodiment can considerably easily be assembled and collapsed for a short period of time, and thus this advantage clears the problem of wasting a space with cold-insulating containers 1...." See the originally filed application at page 62, lines 1-7.

Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

Claims 2-10 include all features of claim 1 from which it depends. Thus, claims 2-10 are allowable as dependent on an allowable base claim.

Claims 34-47

Claims 34-36, 38, 39, 43, and 44 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kao (US Pub. 2004/0140345) in view of Masaaki (JP 07-091594). Claim 37 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Kao and Masaaki in view of Kutun (US Pub. 2004/0118854). Claim 40 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Kao and Masaaki in view of Mills (US Pub. 2002/0134822). Claims 41, 42, and 47 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kao, Masaaki, and Mills in view of Kutun. Claim 45 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Kao and Masaaki in view of Sinclair (US Pub. 2002/0134827). Claim 46 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Kao, Masaaki, and Kutun in view of Cohen (US Pat. 5,207,376) and Wellner (US Pat. 6,155,479). It is respectfully submitted, however, that these claims are patentable over these references for the reasons set forth below.

Claim 35 has been cancelled, thus obviating the rejection of claim 35.

Applicants' invention, as recited by claim 34, includes a feature which is neither disclosed nor suggested by the cited references, namely:

... two of the peripheral walls on opposing sides of the container each have a folding line extending from an upper side edge to a lower side edge thereof ... located at a middle of the respective peripheral wall, each of the peripheral walls ... including two vacuum heat insulators ... being separated along the folding line, respective halves of the peripheral wall on each side of the folding line being rotatable around the folding line such that the folding line moves toward the inside of the container ...

Claim 1 further recites additional features not disclosed or suggested by the cited references, namely:

... the bottom face sheet is attached to the four peripheral walls along lower side edges of the peripheral walls, so as to cover an entire outer surface of the bottom face, when the bottom face is rotated into a close position to form the box ...

Claim 1 recites still more features not disclosed or suggested by the cited references, namely:

... the container has a collapsed state, in which the bottom face is ... positioned approximately parallel with and between two opposing peripheral walls not having the folding lines, and the halves of the two of the peripheral walls having the folding lines are rotated around the folding lines such that the two peripheral walls are folded approximately in half, with each half positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines.

Applicants respectfully submit that Kao in view of Masaaki fails to disclose, teach, or suggest at least the above features of claim 34.

Kao is directed to a collapsible box. As illustrated in FIGS. 1-3, Kao discloses a collapsible box 100 having wall panels 120, 140, 150, and 160. See Kao at paragraph [0018], and FIGS. 1-3.

The Office Action indicates that collapsible box 100 corresponds to the collapsible cold-insulating container of claim 34. Applicants respectfully disagree.

Kao fails to disclose, teach, or suggest that any of walls 120, 140, 150, and 160 have a folding line located in the middle thereof. In fact, Kao is entirely devoid of any teaching of folding lines formed in walls 120, 140, 150, and 160. See Kao at FIG. 3. Thus, Kao must also fail to disclose, teach, or suggest that respective halves of walls 120, 140, 150, and 160 are rotatable around the folding line. Kao must also fail to disclose, teach, or suggest that walls 120, 140, 150, and 160 include two vacuum heat insulators which are separated by a folding line. This is different from claim 1, which requires that two of the peripheral walls on opposing sides each have a folding line formed in a middle thereof, and that each of the peripheral walls having the folding line also including two vacuum heat insulators that are separated along the folding line, and that respective halves of the peripheral wall on each side of the folding line are rotatable around the folding line such that the folding line moves toward the inside of the container.

Also, Kao fails to disclose, teach, or suggest that box 100 has a collapsed state in which a bottom face is positioned approximately parallel with and between two opposing peripheral walls, and in which the halves of two peripheral walls having folding lines are positioned approximately parallel with and between the two opposing peripheral walls. To the contrary, when box 100 is collapsed, the bottom panel 130 is not positioned between any of walls 120, 140, 150, and 160. See FIGS. 1 and 4 of Kao. This is different from claim

1, which requires that in the collapsed state, the bottom face be positioned approximately parallel with and between two opposing peripheral walls not having folding lines, and that the halves of two peripheral walls having folding lines are positioned approximately parallel with and between the two opposing peripheral walls not having folding lines.

Additionally, Kao fails to disclose, teach, or suggest box 100 including a bottom face sheet as described in claim 34. Kao discloses that sheets of paper may be glued to the bottom panel 130 of box 100 in order to provide foldable connections. See Kao at paragraph [0019]. Kao fails to disclose, teach, or suggest that the bottom panel sheet is also attached to the four peripheral walls and the bottom edges thereof. Kao further fails to disclose, teach, or suggest that the bottom panel sheet covers the entire surface of the bottom panel. To the contrary, Kao teaches that gaps are provided along the edges of the bottom panel 130 to form the foldable connections. See Kao at paragraph [0019]. This is different from claim 1, which requires that a flexible rectangle bottom face sheet be attached to the four peripheral walls along lower side edges of the peripheral walls, so as to cover an entire outer surface of the bottom face, when the bottom face is rotated into a close position to form the box.

Masaaki is directed to vacuum insulation. Masaaki fails to disclose, teach, or suggest a collapsible container.

Accordingly, Applicants respectfully submit that Kao in view of Masaaki fails to disclose, teach, or suggest "two of the peripheral walls on opposing sides of the container each have a folding line extending from an upper side edge to a lower side edge thereof, each folding line being located at a middle of the respective peripheral wall, each of the peripheral walls having the folding line also including two vacuum heat insulators, the insulators being separated along the folding line, respective halves of the peripheral wall on each side of the folding line being rotatable around the folding line such that the folding line moves toward the inside of the container...the bottom face sheet is attached to the four peripheral walls along lower side edges of the peripheral walls, so as to cover an entire outer surface of the bottom face, when the bottom face is rotated into a close position to form the box, and the container has a collapsed state, in which the bottom face is rotated inward around the lower side edge and positioned approximately parallel with and between two opposing peripheral walls not having the folding lines, and the halves of the two of the peripheral walls having the folding lines are rotated around the folding lines such that the

two peripheral walls are folded approximately in half, with each half positioned approximately parallel with and between the two opposing peripheral walls not having the folding lines," as recited in claim 34.

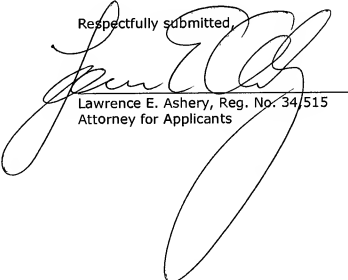
Accordingly, for the reasons set forth above, claim 34 is patentable over the art of record.

Claim 36, while not identical to claim 34, includes features similar to the allowable features of claim 34. Thus, claim 36 is allowable for at least the reasons discussed above with respect to claim 34.

Claims 37-47 include all features of one of claims 34 and 36, from which they depend. Thus, claims 37-47 are allowable as dependent on an allowable base claim.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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